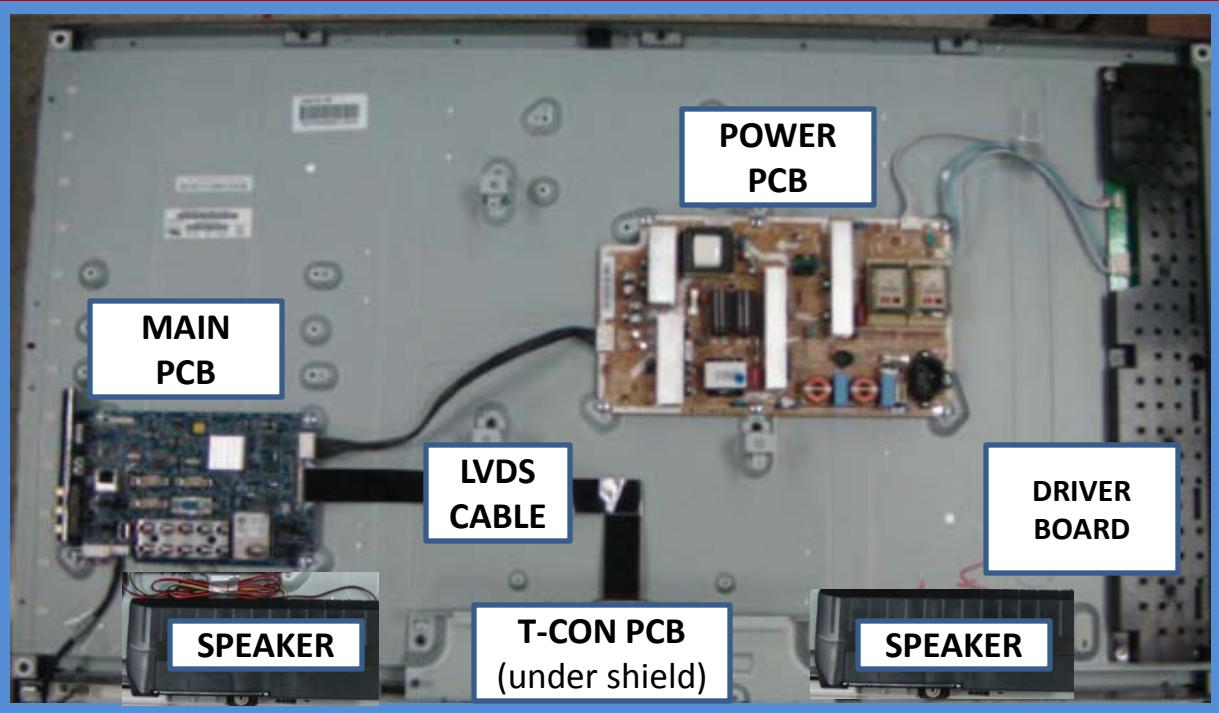


**SERVICE BULLETINS****New 2010 LCD Option Byte Table**

**HELP** : 1-888-751-4086; 1-866-894-0637 (FE)

GSPN

<http://gspn3.samsungcsportal.com>

PLUS ONE

<http://my.plus1solutions.net/clientPortals/samsung>

**HOT TIPS**

**Power On Problems:** (see page 2)

**Video Problems:** (see pages 3,4)

**TIP:** After replacing Main/Panel  
picture is upside down.

**Fix:** Test Mode/Mirror Option/Toggle

**FIRMWARE**

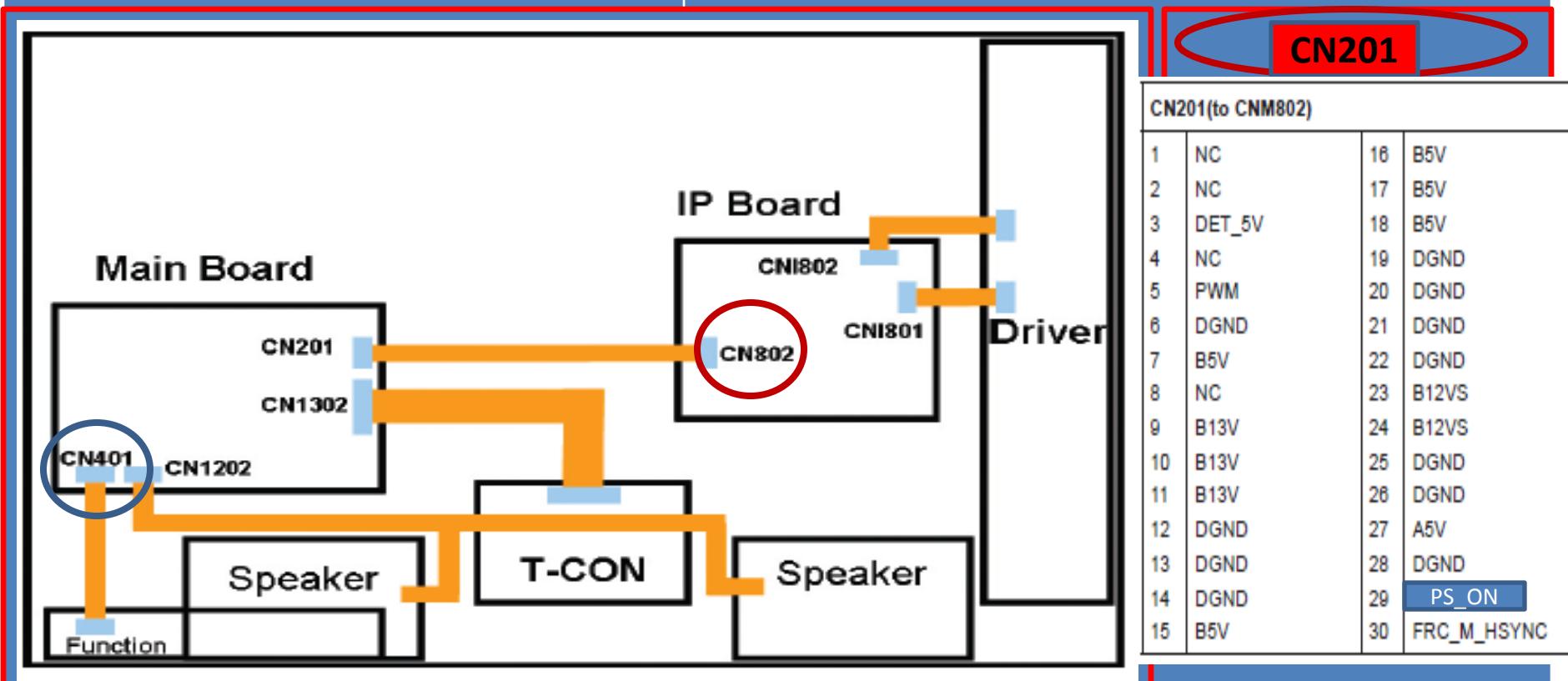
**10/18/2010**

**Firmware for Valencia 1G Model**

- Version : 1030.1
- Folder Name: T-VALAUSC
- Related Models LCD: C560 (Only 40"), C650, C670, C750

**And this firmware prevents below issues.. 'USB Power Overload' message pops up even USB port is not connected  
. Plug & Play is displayed whenever turning on TV.**

Version	Parts No	Short Description
ALL	<a href="#">BN44-00341B</a>	Power PCB Function & IR PCB
ALL	<a href="#">BN96-14262B</a>	
ALL	<a href="#">BN94-02631A</a>	Main PCB
ALL	<a href="#">BN07-00805A</a>	Panel
ALL	<a href="#">BN81-04160A</a>	T-CON PCB
ALL		Stand Guide Neck
ALL	<a href="#">BN96-14017F</a>	Rear Cover
ALL	<a href="#">BN96-12781A</a>	Front Cover
ALL	<a href="#">BN96-13961A</a>	Stand Guide
ALL	<a href="#">BN96-13133A</a>	Stand Base
ALL	<a href="#">BN40-00163A</a>	Tuner
ALL	<a href="#">BN96-12837B</a>	Speaker
ALL	<a href="#">BN96-12723G</a>	LVDS Cable
ALL	<a href="#">3903-000467</a>	Power Cord
ALL	<a href="#">BN59-01043A</a>	Remote
ALL	<a href="#">BN63-01798B</a>	Cleaning Cloth



### Power On Sequence (approximate Voltages)

1. **Standby Voltages: CN201-29 (5V)**
2. **Power On CN201-29 (0 – 3V )**
3. **Low Voltage Supplies On CN201-7,9,10,11,16,17,18 (Volts Listed on CN802)**
4. **Back Light On CN201-3 (0-3V, delayed)**
5. **Back Light Confirm CNI802- (FB1 & FB2)**
6. **Dimming Signal CN201-5 (1V-4V approx)**

### To Force Backlight On without Main Board :

1. Remove Power Cord
2. Remove CN802
3. Plug Power Cord In.
4. Backlight should be on immediately.

### CN401(to Function/IR)

1	IR	6	KEY_INPUT1
2	GND	7	KEY_INPUT2
3	A3.3V_PW	8	LED_STB
4	MSCL_A5V	9	LED_CNTR
5	MSDA_A5V	10	A3.3V_PW

## TROUBLESHOOTING VIDEO PROBLEMS

### 1. Verify Video Operation

- Customer Picture Test (models available)
- “Display” (If display is OK source is suspected)
- Substitute with known good Source  
(external DVD or Signal Generator)

### 2. Using Test Patterns in Service Mode

#### - ENTER SERVICE MODE –

- Select an active source signal. (HDMI preferred)  
Test Pattern may rely on signal source to appear.

Customer Remote

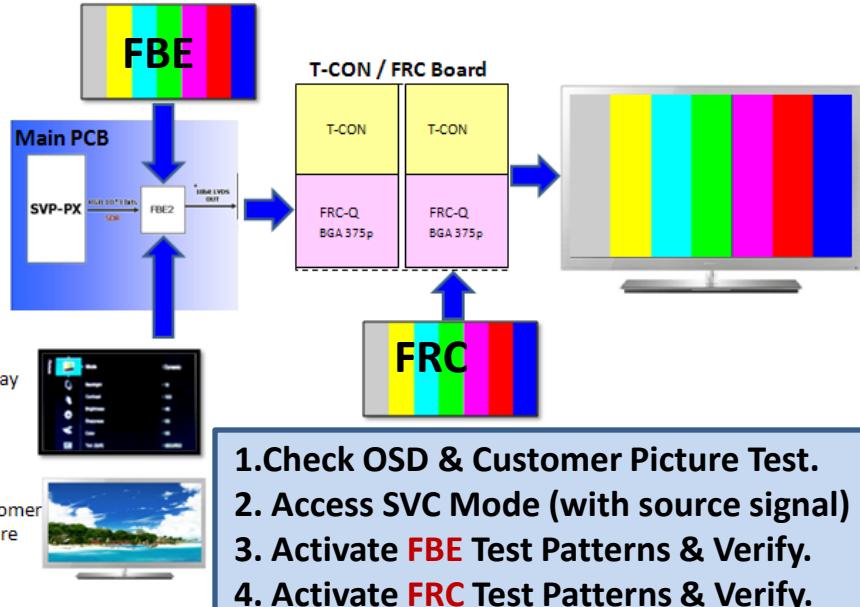
- Power off
- Mute, 182, Power

Service Remote

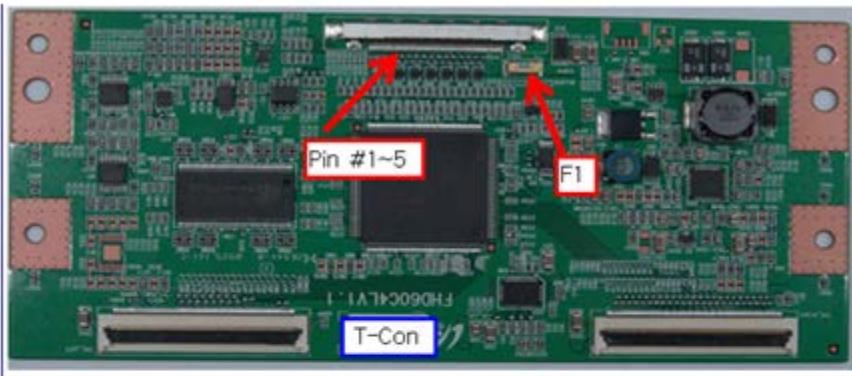
- Power On
- Info, Factory

## 2010 Models with FRC 120Hz/240Hz

### LCD Signal Path for Troubleshooting



## T-Con Troubleshooting



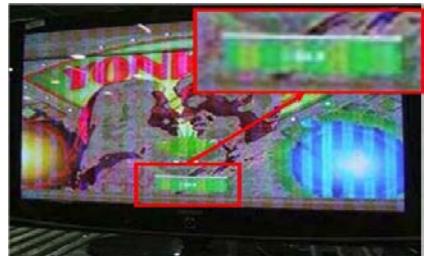
Check for 13V supply to  
Pins 1-5 and LVDS Side of  
F1 Fuse, if 13V is **NOT**  
present....

if 13V IS present but  
NOT on both sides of F1  
fuse (Open Fuse)....

Check for  
defective  
LVDS Cable or  
13V feed error.

Change T-Con  
Board

## ON SCREEN FAILURE EXAMPLES:



If Picture & Display errors  
Defective Main Board, LVDS,  
or T-CON



Green lines or a green screen  
defective main board , LVDS , or  
T-CON.

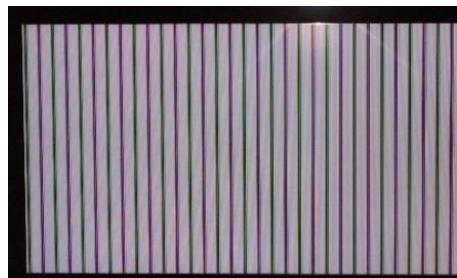


Original Image



Image on Screen

Pixelization can be caused by the main board  
but is more commonly a source error



Vertical or Horizontal Lines :Defective  
Panel likely but also T-CON, LVDS, or Main  
Board. Use Test Patterns in Factory Service  
Mode to determine error)

## ALIGNMENTS:

### 1. Check/Set Option Bytes:

#### Using the Customer Remote

1. Turn the power off and set to stand-by mode
2. Press the remote buttons in this order: POWER-OFF-MUTE-1-8-2-POWER ON to turn the set on.
3. The set will enter service mode and enter service menu. This may take approximately 20 seconds.
4. Press the Power button to enter and store data in memory.
  - If you fail to enter service mode, repeat steps 1 and 2 above.
  - If you fail to enter service mode, repeat steps 1 and 2 above.
5. Initial SERVICE MODE DISPLAY State

Project	PB5G	PB5G	PB5G
Model	PB50	PB50	PB50
Model Code	PN50B550T2FXZA	PN50B550T2FXZA	PN50B550T2FXZA
No	ITEMS		
1	Factory Reset	-	-
2	Type	50FSPL4	50FNK1
3	Model	PB550	PB550
4	TUNER	ALPS	ALPS
5	Region	US	US
6	DDR	SAMSUNG	SAMSUNG
7	Light Effect	Off	Off
8	Inch	50"	50"
9	Exhibition Mode	Off	Off

Option Bytes

Factory Reset	50HSnB4
Type	PB550
Model	ALPS
TUNER	US
Region	SAMSUNG
DDR	Off
Light Effect	50"
Inch	Exhibition Mode

Model Code	Front Color					
		Type	Model	Tuner	Region	Side Label
LN46C750R2FXZA	T-R-BLK	46A2UF0C	LC750	Semco	US	SQ01

### 2. Check/Perform Firmware Upgrade for all repairs.

### 3. Perform reset in Service Mode & Plug and Play if Main board is replaced.

## SPECIAL NOTES:

Inform customer of reset of all  
Settings if Main Board or Panel is replaced.